



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/806,274	03/23/2004	Tetsuo Fujii	01-586	1870

23400 7590 04/21/2005

POSZ LAW GROUP, PLC
12040 SOUTH LAKES DRIVE
SUITE 101
RESTON, VA 20191

EXAMINER

DICKEY, THOMAS L

ART UNIT	PAPER NUMBER
----------	--------------

2826

DATE MAILED: 04/21/2005

Please find below and/or attached an Office communication concerning this application or proceeding. .

H.A

Office Action Summary

Application No.

10/806,274

Applicant(s)

FUJII, TETSUO

Examiner

Thomas L. Dickey

Art Unit

2826

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 17 March 2005.
 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
 4a) Of the above claim(s) 8-18 is/are withdrawn from consideration.
 5) ☐ Claim(s) _____ is/are allowed.
 6) ☒ Claim(s) 1-4 is/are rejected.
 7) ☐ Claim(s) 5-7 is/are objected to.
 8) ☒ Claim(s) 1-18 are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
 10) ☒ The drawing(s) filed on 23 March 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) ☒ All b) ☐ Some * c) ☐ None of:
 1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
 * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
 Paper No(s)/Mail Date 03/23/2004.
 4) ☐ Interview Summary (PTO-413)
 Paper No(s)/Mail Date. _____.
 5) ☐ Notice of Informal Patent Application (PTO-152)
 6) ☐ Other: _____.

Art Unit: 2826

DETAILED ACTION

Election/Restriction

1. Applicant's election without traverse of the first embodiment, claims 1-7 readable thereon, in the Paper filed 03/17/05 is acknowledged.

Oath/Declaration

2. The oath/declaration filed on 03/23/2004 is acceptable.

Drawings

3. The formal drawings filed on 03/23/2004 are acceptable.

Priority

4. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Information Disclosure Statement

5. The Information Disclosure Statement filed on 03/23/2004 has been considered.

Art Unit: 2826

Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1,3, and 4 are rejected under 35 U.S.C. § 102(b) as being anticipated by OTANI (6,316,840).

Otani 840 discloses a semiconductor device comprising a first substrate DP-71-11 including first DP, second 71, and third 11 layers; and a second substrate 31-2-MV including fourth 31, fifth 2, and sixth MV layers; the first substrate DP-71-11 providing an electric device (signal processor, note column 13 line 22), and the second substrate 31-2-MV providing a physical quantity sensor, wherein the first layer DP of the first substrate DP-71-11 and the fourth layer 31 of the second substrate 31-2-MV are shields for protecting the electric device and the physical quantity sensor, the electric device is disposed in the third layer 11 of the first substrate DP-71-11, wherein the physical quantity sensor is disposed in the sixth layer MV of the second substrate 31-2-MV, wherein the second layer 71 of the first substrate DP-71-11 is made of an insulation layer so that the first and third layer 11s are electrically isolated, and wherein the fifth layer 2 of the second substrate 31-2-MV is made of an insulation layer so that the fourth 31 and sixth MV layers are electrically isolated, and wherein the physical quantity

Art Unit: 2826

sensor includes a movable portion disposed in the sixth layer MV, wherein the movable portion is movable in accordance with a physical quantity applied to the device so that the physical quantity sensor outputs a signal corresponding to a displacement of the movable portion, and wherein the first substrate DP-71-11 faces the second substrate 31-2-MV so that the electric device electrically connects to the physical quantity sensor.

Note figure 15, column 11 lines 18-25, and column 13 lines 20-30 of Otani '840.

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. § 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

A. Claim 2 is rejected under 35 U.S.C. § 103(a) as being unpatentable over OTANI (6,316,840) in view of OTANI (2003/0047804).

Otani '840 discloses a semiconductor device having all the limitations of claim 2 except for the first layer and the fourth layer being grounded. Note figure 15, column 11 lines 18-25, and column 13 lines 20-30 of Otani '840. However, Otani '47804 discloses a semiconductor device with the first layer 13 of a signal processor 12 and the fourth layer 14 of a physical quantity sensor 11 being grounded, because (according to Otani '47804) by fixing the potential of the fourth layer 14 to a certain level, it is possible to

Art Unit: 2826

realize a product having high reliability and high performance without the influence of disturbance such as static electricity and radio interference. Note figures 1A-1B and paragraphs 0008, 0013, and 0033 of Otani '840. Therefore, it would have been obvious to a person having skill in the art to augment Otani '840's semiconductor device with the fixed, ground potential layers on signal processor and sensor such as taught by Otani '47804 in order to eliminate the influence of disturbance such as static electricity and radio interference to thus realize a product having high reliability and high performance.

Allowable Subject Matter

8. Claims 5-7 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

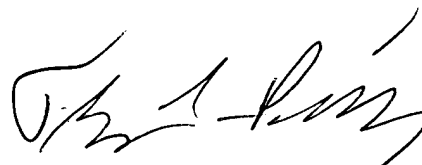
Conclusion

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thomas L Dickey whose telephone number is 571-272-1913. The examiner can normally be reached on Monday-Thursday 8-6.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nathan J Flynn can be reached on 571-272-1915. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 2826

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

A handwritten signature in black ink, appearing to read 'Thomas L. Dickey', is positioned above the printed name.

Thomas L. Dickey
Patent Examiner
Art Unit 2826
04/05